

### **REMARKS**

The present amendment is responsive to the Office Action mailed November 3, 2006. In accordance with the enclosed three (3) month Petition for an Extension of Time being mailed concurrently herewith, the time for response has been extended to May 3, 2007 and accordingly this amendment is thus timely filed.

In the Office Action under response, claims 1-2 and 4-9 stand rejected under 35 USC §§103 over the Haare et al. reference of record. The Examiner contends that the use of any chlorination agent and solvent would have been obvious in Applicants' claimed process, compared to the thionyl chloride/organic solvent of Haare, absent any unexpected results. Applicants respectfully traverse.

In accordance with the present amendment, Applicants have amended the claims such that all of presently pending claims 1 and 5-9 have been limited to a process utilizing specifically HCl as a chlorinating agent, and specifically dioxane as the organic solvent. Applicants have discovered that by using HCl as the chlorinating agent and dioxane as the organic solvent, the recycled resin has an unexpectedly high active chlorine content. This use of HCl and dioxane and its advantages are not disclosed or suggested by the cited reference. In support of this statement, Applicants have run three tests to determine active chlorine content in the example of Haare (dichloromethane and thionyl chloride), a second test utilizing dioxane and thionyl chloride and finally a third test utilizing dioxane and HCl. The data for each test are depicted below:

Test	Resin (g)	Solvent	Chlorinating Agent (mmol Cl)	Active Chlorine Content
Haare	10 g	100 ml CH <sub>2</sub> Cl <sub>2</sub>	1.7 ml SOCl <sub>2</sub> (47 mmol Cl)	1.4 mol/kg
Test 2	10 g	100 ml Dioxane	25 ml SOCl <sub>2</sub> (700 mmol Cl)	0.8 mol/kg
Test 3	10g	100 ml Dioxane	25 g HCl (gas) (700 mmol Cl)	1.8 mol/kg

The data demonstrate the unexpectedly high active chlorine content of Applicant's invention by the combination of HCl as the chlorinating agent and dioxane as the organic solvent

Accordingly, Applicants respectfully submit the claims as amended are patentably distinct over the asserted art of record and thus that the 103(a) rejection should be obviated.

### CONCLUSION

In view of the foregoing amendments and remarks, Applicants respectfully solicit allowance of claims 1 and 5-9 as amended.

No further fee is required in connection the filing of this Amendment. If any additional fees are deemed necessary, authorization is given to charge the amount of any such fee to Deposit Account No. 08-2525.

Respectfully submitted,



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